



DEPARTMENT OF THE NAVY

NAVAL SEA SYSTEMS COMMAND
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In reply refer to:
NAVSEAINST 4790.8B CH 1
SEA 04RM
09 JUN 2004

NAVSEA INSTRUCTION 4790.8B CHANGE TRANSMITTAL 1

From: Commander, Naval Sea Systems Command

Subj: SHIPS' MAINTENANCE AND MATERIAL MANAGEMENT (3-M) MANUAL

1. Purpose. To include a flowchart to NAVSEAINST 4790.8B Appendix A, Priority Code definition that aids in determining the correct Priority Code to assign on OPNAV Form 4790/2K. Additionally, Appendix G has been updated to provide guidance on rescheduling of Semi-annual and higher maintenance requirements.

2. Action. Insert the flowchart after page A-36 and replace Appendix G with the attached Appendix G.

A handwritten signature in blue ink, appearing to read "W. R. Klemm", is positioned above the printed name.

W. R. Klemm
Deputy Commander
Logistics, Maintenance
and Industrial Operations

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Distribution:

SNDL A1F (ASSTSECNAV FMC)
 A3 (Chief of Naval Operations)
 A5 (Chief of Naval Personnel)
 A1J (ASSTSECNAV RDA)
 A1J1L (PEO Integrated Warfare Systems)
 A1J1M (PEO Littoral and Mine Warfare)
 A1J1N (PEO SUB)
 A1J1P (PEO SHIPS)
 A1J1Q (PEO CARRIERS)
 21A (Fleet Commanders)
 22A (Fleet commanders)
 23 (Force Commanders)
 24 (Type commanders) (less 24J)
 25 (Mine Warfare) (less 25B)
 26A (Amphibious Group)
 26B3 (Surface Force Reserve Commander)
 26E (Amphibious Unit)
 26F (Operational Test and Evaluation Force and Detachment)
 26J (Afloat Training Group and Detachment)
 26L (Priority Material Office and Detachment)
 26R (Mobile Inshore Undersea Warfare Unit and Group)
 26T (Regional Support Group and Organization)
 26U (Regional Maintenance Center)
 26Z (Shore Intermediate Maintenance Activity and Detachment/Naval Reserve Maintenance Facility)
 26BB (Fleet CSOSS Development and Implementation Team)
 26MM (Fleet Integrated Logistics Overhaul Activity and Team)
 26VV (Submarine Force Shipyard Representative)
 28 (Squadron, Division and Group Commanders - Ships)
 29 (Warships)
 30 (Mine Warfare Ships)
 31 (Amphibious Warfare Ships)
 32 (Auxiliary Ships)
 36 (Service Craft)
 39 (Construction Battalions, Brigades, Regiments and Detachments)
 41A (Commander Military Sealift Command)
 41B (Area commanders, MSC)
 B5 (Coast Guard)
 C28D (Fleet Technical Support Center Atlantic Detachment)
 C31B (Fleet Technical Support Center Pacific Detachment)
 C31F (Maintenance Detachment)

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C31G (Ship Repair Facility Detachment, Pacific)
C81B (Space and Naval Warfare Systems Center Detachment)
SNDL C84 (Shore Based Detachments, SEASYS COM) (Less C84J)
FA10 (Submarine Base LANT)
FA13 (Submarine Support Facility LANT)
FA50 (Trident Refit Facility, LANT)
FA8 (Fleet Technical Support Center, LANT)
FB13 (Submarine Base PAC)
FB29 (Intermediate Maintenance Facility, PAC)
FB8 (Fleet Technical Support Center, PAC)
FB30 (Ship Repair Facility)
FC5 (Support Activity NAVEUR)
FF5 (Naval Safety Center)
FI1 (Naval Special Warfare Center)
FF8 (Inspection and Survey Board)
FF42 (SCOL Postgraduate)
FKA1A (Air Systems Command)
FKA1B (Space and Naval Warfare Systems Command and
Activities)
FKA1F (Supply Systems Command)
FKA1G (Sea Systems Command)
FKA8F (Strategic Systems Program Office) (FKA8F Only)
FKM9 (Fleet and Industrial Supply Center)
FKM14 (Naval Inventory Control Point) (Mechanicsburg Only)
FKM17 (Supply Information Systems Activities)
FKP (Naval Sea Systems Command Field Activities) (Less
FKP24, FKP6B)
FT22 (Fleet Training Center)
FT28 (Naval Education Training Command)
FT30 (Service School Command)
FT31 (Naval Training Center)
FS1 (Intelligence Command Headquarters (Code 21))
FT1 (Naval Education Training Command)
FT43 (Surface Warfare Officers School Command)
FT88 (Engineering Duty Officer School)

NAVSEA Special List Y1

PRIORITY CODE GUIDANCE

TO RAISE THE PRIORITY FOLLOW FLOW CHART ALL WORK CANDIDATES/ JSNS START WITH 4 DESIRABLE

DOES THIS WORK CANDIDATE HAVE A DIRECT EFFECT ON ANY OF THE SHIPS' MISSIONS, MISSION SUPPORT AND BACK UP SYSTEMS OR HAVE AN IMPACT ON THE TRAINING?

NO

YES

IS THIS AN IMPORTANT, EXTREMELY IMPORTANT OR CRITICAL SAFETY / DAMAGE CONTROL ITEM

YES

NO

IS THIS REQUIRED FOR A BARE MINIMUM OR NORMAL LEVEL OF HUMAN NEEDS AND SANITATION AND/OR COMFORT?

YES

NO

WILL THIS PROVIDE FOR A MAJOR REDUCTION IN FUTURE SHIPS' MAINTENANCE AND/OR ECONOMICAL OPERATION OF THE SHIP OR IS A PLANNED & APPROVED MODERNIZATION OR ALTERATION JOB

YES

FOLLOW UP GUIDANCE IN NWP 1-03.3, 1-03.1 AND NTTP 1-03.3A WHEN A CASREP IS WRITTEN THE PRIORITY ON THE WORK CANDIDATE WILL BE SET AS FOLLOWS;
C-4 CASREP 1 MANDATORY
C-3 CASREP 2 ESSENTIAL
C-2 CASREP 3 HIGHLY DESIRABLE

IS THIS REQUIRED FOR MINIMUM ACCEPTABLE LEVEL OF PRESERVATION?

YES

NO

THIS IS PRIORITY 2 ESSENTIAL

IS THIS REQUIRED FOR MINIMUM LEVEL OF APPEARANCE OR PART OF ASSESSMENT TASKING

YES

NO

THIS IS PRIORITY 3 HIGHLY DESIRABLE

CAN YOU RECEIVE THE PARTS AND BE FULLY OPERATIONAL WITHIN 48 HOURS?

NO

YES

FOLLOW UP GUIDANCE IN NWP 1-03.3, 1-03.1 AND NTTP 1-03.3A WHEN A CASREP IS WRITTEN THE PRIORITY ON THE WORK CANDIDATE WILL BE SET AS FOLLOWS;
C-4 CASREP 1 MANDATORY
C-3 CASREP 2 ESSENTIAL
C-2 CASREP 3 HIGHLY DESIRABLE

REPAIR EQUIPMENT DOCUMENT REPAIRS NO NEED TO RAISE PRIORITY LEVEL

MAINTENANCE AND MATERIAL MANAGEMENT (3-M) MANUAL

APPENDIX G

MANUAL PREPARATION OF PMS SCHEDULES

APPENDIX G

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APPENDIX G

MANUAL PREPARATION OF SCHEDULES

PURPOSE

This appendix provides instruction on how to create and maintain cycle, quarterly and weekly schedules for commands that are unable to utilize the SKED Program. Appendix H will also assist in those instances when SKED is not available due to network and or computer difficulties and the Work Center needs to manually track PMS accomplishment until the program is available.

PREPARATION OF CYCLE PMS SCHEDULE

Cycle PMS Schedules are used to plan and schedule maintenance requirements to be conducted during each calendar quarter. Department heads should devote considerable attention to the preparation of the Cycle schedule since these efforts will directly affect long-range PMS scheduling.

a Materials required for preparation:

1 Blank Cycle schedules (OPNAV 4790/13 or OPNAV 4790/13A)

(2) The work center's portion of the PMS Master File (List of Effective Pages (LOEP)) (Report No. PMS 5)

(3) Applicable MRCs (for general reference) from the Work Center's PMS Manual.

4 Applicable MIPs from the work center's file.

b Procedures:

(1) Initial entries will be typed or legibly written in black ink on the Cycle schedules. Changes will be made in ink and initialed. In the "Schedule Quarter After Overhaul As Indicated" columns, each quarter is circled when the schedule for that quarter has been prepared. The previous quarter is X'd out.

(2) The cycle numbering will be reset after three Inter-Deployment Training Cycles or Docking Availability. The next full calendar quarter following completion will be designated as the "first quarter after overhaul." Shore stations will reset after every 20 quarters.

(3) From the LOEP, accurately transcribe each item of equipment in MIP sequence excluding equipment coded "NIR", "NMR", and "MRS" on the Cycle schedule. If desired, list the MIPs for equipment coded "MRS", and complete the scheduling information for those items when the developed PMS is received. (Note: It is not necessary for the Cycle schedule to match the LOEP line for line.)

(a) Use the MIP column to list the MIP code without the date coding, e.g., E-1/55, EL-2/B0, 4411/I, etc

(b) Use the Component column to list the name of each system, subsystem, or equipment. When more than one item is located within a work center, the serial numbers or ship's numbering system shall be entered to identify each item on a single line of the schedule. The location may be entered. "EGL" shall be entered in this column when an EGL is applicable. When multiple EGLs are used, they can be scheduled on separate lines or on one line (or group of lines) as "1-Q-1", "2-Q-1", "3-Q-1", etc.

(4) From the applicable MIP, list the periodicity codes in the "Schedule Quarter After Overhaul As Indicated" and "Each Quarter" column as described below. Only the presence of mandatory related maintenance will be indicated by the "#" symbol associated with the parent MR (e.g., "S-1#").

(a) In the column "Schedule Quarter After Overhaul As Indicated:"

1. List each semiannual (S) maintenance requirement in one of the four columns, then list again 6 months later. For example, an S-1 requirement scheduled to occur in the 1, 5, and 9 quarters is also scheduled in the 3, 7, and 11 quarters.

2. List each annual (A) maintenance requirement in one of the four columns.

3. List each multiple month periodicity MR (9M, 18M, 24M, 30M, 36M, etc.). Quarter after overhaul must be indicated in parentheses. (For example, 18M-1(6) indicates an "every 18 months" periodicity MR scheduled to be accomplished in the sixth quarter after overhaul.) The following tables serve as examples for determining quarter after overhaul. To use these tables, determine in which quarter after overhaul the MR will first occur. Go to this quarter in the first row of the table.

Then schedule the MR for the quarters in that column as applicable. (For example, if 18M-1 is scheduled for the 4th quarter after overhaul, it must also be scheduled for the 10th, 16th, and 22nd quarter after overhaul; as applicable.) The table elements below are listed by quarters (3 months = 1 quarter).

18M Scheduling Table

First Scheduling:	1	2	3	4	5	6
Second Scheduling:	7	8	9	10	11	12
Third Scheduling:	13	14	15	16	17	18
Fourth Scheduling:	19	20	21	22	23	24

24M Scheduling Table

First Scheduling:	1	2	3	4	5	6	7	8
Second Scheduling:	9	10	11	12	13	14	15	16
Third Scheduling:	17	18	19	20	21	22	23	24

30M Scheduling Table

First Scheduling:	1	2	3	4	5	6	7	8	9	10
Second Scheduling:	11	12	13	14	15	16	17	18	19	20
Third Scheduling:	21	22	23	24						

36M Scheduling Table

First Scheduling:	1	2	3	4	5	6	7	8	9	10	11	12
Second Scheduling:	13	14	15	16	17	18	19	20	21	22	23	24

48M Scheduling

First scheduling in first 16 quarters
Second scheduling 16 quarters later

60M Scheduling

First scheduling in first 20 quarters
Second scheduling 20 quarters later

NOTE

Prior to scheduling 30M, 36M, 48M, or 60M, review MRC to see if specific quarter after overhaul is indicated

4. Ships with cycles of less than 24 quarters are to schedule cycle requirements within this operational time frame. Ships delayed beyond 24 quarters are to extend their Cycle PMS Schedule by adding quarter numbers in the "Schedule Quarter After Overhaul As Indicated" column. (Multiple month requirements needed before entering overhaul must be reviewed and rescheduled as necessary.)

(a) In the "Each Quarter" Column: List 2W, 3W, M, 2M, and Q maintenance requirements, and all situational requirements. Only the presence of mandatory related maintenance will be indicated by a "#" symbol with the parent MR.

5. The prepared Cycle PMS Schedule is reviewed, signed, and dated by the Department Head. Once the cycle schedule has been signed, maintenance requirements listed are not to be moved from one quarter to another. If rescheduling becomes necessary, it will be reflected on the Quarterly PMS Schedules.

6. All superseded Cycle schedules will be retained for 12 months

G-3 PREPARATION OF QUARTERLY PMS SCHEDULE

OPNAV 4790/14 or 14A (for SSBNs, 14B or 14C) will be used. Initial form entries will be typed or legibly written in black ink. Changes will be made in ink and initialed. Process is as follows:

- a. Enter the work center code.
- b. Enter the calendar year of the current quarter
- c. Enter the number of the quarter after overhaul as reflected on the Cycle PMS Schedule.
- d. Enter the calendar months of the quarter (SSBNs will prepare quarterly schedules to coincide with crew cycle).
- e. Each column represents a week and is divided into 7 days by the use of tick marks across the top. The first tick marked space within a column represents Monday. Monday's date for each week in the quarter is placed on the pedestal between each column. The first Monday in January, April, July, or October will begin each quarter.

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f. The days the ship expects to be underway are lightly shaded (in pencil) across the tick marks (this does not apply to submarines).

g. Using both the LOEP and the Cycle PMS Schedule, enter the complete MIP number in the column titled "MIP" in a space in line with the subject equipment on the cycle schedule. From the Cycle PMS Schedule, select the "Schedule Quarter After Overhaul As Indicated" column corresponding to the quarter being scheduled. Transcribe and appropriately schedule each of the maintenance requirements (S, A, and multi-month) listed in this column to the quarterly schedule. From the maintenance requirements listed in the "Each Quarter" column, transcribe and appropriately schedule only 2W, 3W, M, 2M, and Q MRs. The intervals of periodic maintenance are defined as:

(1) Monthly--Will be scheduled within the interval between 3 and 6 weeks following the last accomplishment. A monthly PMS maintenance requirement must be scheduled three times in a quarter. Note: If a monthly maintenance check is circled and rescheduled, it may be necessary to move all subsequent checks to meet allowed intervals.

(2) Multi-Month, less than annual.

(a) 2M--Every second month within the interval between seven and ten weeks.

(b) 9M--Every ninth month within the interval between 8 and 10 months from its last accomplishment.

(3) Quarterly--Will be scheduled once each quarter within the interval 2 to 4 months following the last accomplishment.

(4) Semiannual--Within the interval between 4 and 8 months following last accomplishment.

(5) Annual--Within the interval between 3 and 5 quarters following last accomplishment.

(6) Multi-months greater than annual. Those MRs performed less frequently than once a year (e.g., 18M, 24M, 36M etc.) within the interval of plus/minus one quarter of the quarter specified by the periodicity interval.

NOTE

To determine if maintenance actions should be performed in port or at sea, refer to MIPs and MRCs for a brief description of the maintenance actions.

h. With the exception of related daily and weekly PMS requirements, ensure that all mandatory related maintenance is identified and scheduled. Mandatory maintenance will be identified with a leading pound sign "#" and bracketed within parentheses. Convenience related maintenance selected for accomplishment is identified by () brackets.

i. All calendar situation requirements (24M-2R, A-2R, S-1R, Q-3R, M-1R) must be accomplished at least once during the calendar periodicity specified. In addition, these requirements and situational requirements will be accomplished and documented each time the situation arises.

j. Bring forward any PMS requirement listed in the "Reschedule" column of the previous Quarterly PMS Schedule to the Quarterly PMS Schedule being prepared. Ensure emphasis is given to accomplishing rescheduled MRs.

k. The prepared Quarterly PMS Schedule shall be reviewed, signed, and dated by the Division Officer in the approval signature block. If the ship's operating schedule changes significantly, review the PMS requirements scheduled in the affected periods and reschedule as necessary.

G-4 USE OF THE QUARTERLY SCHEDULE

The Quarterly PMS Schedule serves as a directive for work center supervisors for scheduling weekly maintenance.

a. Each Monday, the Work Center Supervisor shall ensure the previous week's column of the Quarterly PMS Schedule is updated by use of the following symbols:

X = Fully Accomplished. The symbol "X" is the mark used to indicate completion of a maintenance requirement. Fully accomplished MRCs will be X'd off separately on the quarterly schedule. Ensure that situation requirements which were accomplished are added and X'd off separately

O = Not Fully Accomplished. A circled requirement indicates a requirement that was not accomplished or only partially

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accomplished following the applicable MRC. A circle with a short arrow will be used to indicate rescheduled MRs.

¢ = Satisfied by Higher Level Test. Upon successful completion of the system (higher) level test, an "X" is marked over the system level test requirement listed on the quarterly schedule. The symbol is used to mark those scheduled equipments or lower level MRC requirements which have been satisfied by the successful completion of the parent system test. A brief explanation of the parent system test (including the MIP, who performed the maintenance, and when) is required on the reverse side of the quarterly schedule. (The MRCs that are so satisfied are identified on the applicable system level test MIP.)

b. The Work Center Supervisor is responsible for rescheduling any circled requirements still within periodicity and for determining the reason for a maintenance action not being accomplished or not fully accomplished.

c. From the Quarterly PMS Schedule, the Work Center Supervisor schedules the requirements for the following week on the Weekly PMS Schedule, updates the information in the "Outstanding Repairs And PM Requirements Due In The Next 4 Weeks" column, and returns the Weekly PMS Schedule to the work center.

d. If a requirement is not fully accomplished (non/partially accomplished) within periodicity, in addition to being circled on the front of the Quarterly PMS Schedule, it must be identified on the back of the schedule by the complete MIP number and MRC code, followed by a brief reason for non/partial accomplishment. For example:

C-2/1-11 M-1 Unable to accomplish step 1.j. "Test operate transmitter" due to antenna casualty

e. Unaccomplished S, A, or multiple month periodicity requirements will be added to the "Reschedule" column for accomplishment in the next quarter only if still within their assigned periodicities. The Division Officer must ensure that priority is given to completing maintenance requirements rescheduled into the next quarter.

f. At the end of the quarter, the Division Officer will review, sign, and date the back of the schedule for the quarter

just completed. The completed Quarterly PMS Schedule is removed from the holder after the close of each quarter and retained by the department head as a planned maintenance record. The four previously completed quarterly schedules will be retained.

g. Rewriting of Quarterly Schedules to facilitate legibility is discouraged, and will only be done with the Division Officer's written approval.

G-5 PREPARATION OF WEEKLY PMS SCHEDULE

Using OPNAV 4790/15 or 4790/14A, type or legibly write in ink the following information from the Cycle PMS Schedule, the LOEP and applicable MIPs.

a. Work center identification.

b. MIP number and component will match the Cycle PMS Schedule line for line.

c. Daily and weekly PMS requirements as indicated on the MIPs. List all weekly requirements in the Monday column and daily requirements in each day of the week column and twice in the "SAT. - SUN." column.

d. All situation requirements are listed in the "Next Four Weeks" column and scheduled, as the situation requires. The 2W and 3W periodicities are also listed in the "Next Four Weeks" column.

e. The schedule will then be either laminated or covered with plastic so it can be cleared and updated each week.